AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS

- 1. (currently amended) A band-gap reference circuit, comprising:
 - a band-gap reference unit;
 - a buffer circuit electronically coupled with said band-gap reference unit; and
- a <u>single component</u> voltage pull-up device electronically coupled between and located intermediate to said band-gap reference unit and said buffer circuit, wherein said voltage pull-up device acts to reduce a required supply voltage to maintain a band-gap reference voltage and wherein said voltage pull-up device is implemented as a transistor with a VBE of less than 1.0 volts.
- 2. (previously presented) A band-gap reference circuit as described in Claim 1, wherein said band-gap reference circuit resides in an integrated circuit device.
- 3. (previously presented) A band-gap reference circuit as described in Claim 1, wherein said band-gap reference circuit is implemented in a silicon substrate.
- 4. (previously presented) A band-gap reference circuit as described in Claim 1, wherein said buffer circuit is implemented as a transistor.

2

5. (cancelled)

NSC-P05052/JPH/RAR Serial No.: 09/970,297 Examiner: Cunningham, Terry D.

Art Unit: 2816

6. (previously presented) A band-gap reference circuit as described in Claim 1, wherein said band gap reference voltage is provided by current through a transistor with a VBE of less than 1.0 volts.

7. (currently amended) An electronic device, comprising:

a silicon substrate:

electronic circuitry constructed in said silicon substrate; and

a band-gap reference circuit comprising a band gap reference unit, a buffer circuit, and a <u>single component</u> voltage pull-up device electronically coupled in said electronic device, wherein said electronic circuitry requires reference to the output voltage of said band-gap reference circuit and said band-gap reference circuit is enabled for low impedance by said buffer circuit, wherein said buffer circuit comprises a transistor with a VBE of less than 1.0 volts, and wherein said <u>single component</u> voltage pull-up device is coupled between <u>and located intermediate to</u> said band-gap reference unit and said buffer circuit.

8. (original) An electronic device as described in Claim 7, wherein said electronic device is an integrated circuit device.

- 9. (cancelled)
- 10. (cancelled)

11. (previously presented) An electronic device as described in Claim 7, wherein said transistor with a VBE of less than 1.0 volts is connected as an emitter follower.

- 12. (original) An electronic device as described in Claim 7, wherein said band-gap reference circuit is enabled for low supply voltage.
- 13. (original) An electronic device as described in Claim 12, wherein said band-gap reference circuit is enabled for said low supply voltage by a voltage pull-up device.
- 14. (cancelled)
- 15. (previously presented) An electronic device as described in Claim 13, wherein said band gap reference voltage is provided by current through a transistor with a VBE of less than 1.0 volts.
- 16. (currently amended) In an electronic device, a method for providing a reference voltage, comprising:

flowing current through an electronic element such that the band-gap voltage of said electronic element provides said reference voltage;

providing a buffer circuit and a band gap voltage reference unit coupled to said buffer circuit; and

adjusting the voltage across said buffer circuit, by use of a <u>single component</u> voltage pull-up device coupled between and located intermediate to said buffer circuit and said band gap voltage reference unit, so that said band-gap reference voltage is maintained, wherein said voltage across said buffer circuit is a VBE of less than 1.0 volts.

- 17. (original) A method as described in Claim 16, wherein said electronic device is an integrated circuit device.
- 18. (original) A method as described in Claim 16, wherein said buffer circuit is implemented as a transistor circuit.

NSC-P05052/JPH/RAR Examiner: Cunningham, Terry D. Serial No.: 09/970,297 4 Art Unit: 2816

- 19. (original) A method as described in Claim 18, wherein said transistor circuit is connected as an emitter follower.
- 20. (original) A method as described in Claim 16, wherein said band-gap reference circuit is enabled for low supply voltage.
- 21. (previously presented) A method as described in Claim 20, wherein said band-gap reference circuit is enabled for said low supply voltage by a voltage pull-up device coupled between said buffer circuit and a band gap reference unit.
- 22. (cancelled)
- 23. (previously presented) A method as described in Claim 21, wherein said band gap reference voltage is provided by current through a transistor with a VBE of less than 1.0 volts.

NSC-P05052/JPH/RAR Serial No.: 09/970,297